(54) Title: METHOD, SYSTEM AND ROUTER PROVIDING ACTIVE QUEUE MANAGEMENT IN PACKET TRANSMISSION SYSTEMS
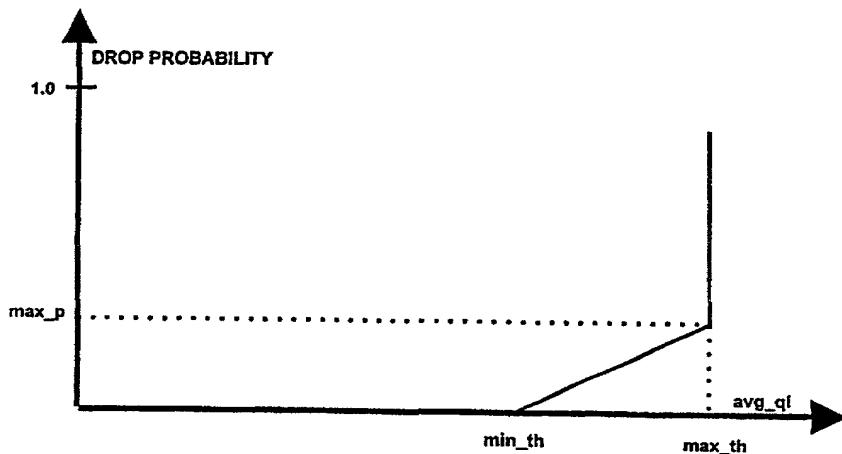
(57) Abstract

The present invention provides a method of active queue management for handling prioritised traffic in a packet transmission system. The method is able to provide differentiation between traffic originating from rate adaptive applications that respond to packet loss. Traffic is assigned one, of at least a first and second, drop precedent level, namely in profile and out of profile. The method includes the steps of: calculating an average queue length, avg_ql; assigning minimum thresholds, min_th_in and min_th_out, for in profile packets and out of profile packets respectively, and a maximum threshold, max_th; retaining all packets with their initially assigned drop precedent levels while the average queue length is less than, or equal to, a threshold th_in; assigning a drop probability to each packet, determined from the average queue length; retaining all packets while avg_ql is less than th_in; and dropping packets in accordance with their assigned drop probability; the parameter max_p_out is greater than max_p_in, where max_p_out is the maximum drop probablity of packets marked as out of profile and max_p_in is the maximum drop probability for packets marked as in profile.